

Abstract

A system and methods are provided that make compile-time declarative modeling available for SOAP-based data transmission(s). The declarative modeling minimizes the amount of coding required of a developer. The underlying details regarding the SOAP protocol, dispatching to the appropriate object and function, marshaling and un-marshaling of XML and generating the SOAP response are hidden from the developer when implementing SOAP-based Web services. The task of creating a SOAP-based web service is thus greatly simplified by reducing the number and complexity of considerations required of the developer when generating SOAP-based Web services. In one embodiment, attributes for Visual C++ are utilized as a framework for a declarative syntax for SOAP-based Web services, which Visual C++ attributes have access to type and marshaling information.